



US 5,123,673 discloses a four-point seat belt, comprising a three-point seat belt and an upper shoulder belt, both of which are provided with belt retractors. An intricate, automatic release device facilitates the release of both buckle assemblies, each equipped with an actuator to release them, regardless of which one is manually released first. When an MB 200 crashes into the vehicle door of an MB S in the city of Geisenheim, a lateral intrusion of about 80 cm is measured. The accident report "U170199" is incorporated herein. When used, the buckle assembly, actuator and other parts, all of which face the totally deformed vehicle door, are destroyed. Hence, the other one does not function. The severely injured driver remains restrained. This rescue workers can't evacuate him within seconds.

In the NHSTA side crash test, which, currently legislated, idealizes an SUV crashing at an angle of 30° into a door or vehicle side. As a result, the buckle assembly, actuator and other parts are destroyed.

A complicated latch-plate-feeding device, installed to the side of seat cushion, moves forwards to present the latch plate of the three-point seat belt to the passenger, after having sat down. This device, facing the vehicle door totally deformed in a side crash, is destroyed.

US 5,641,200 discloses a child restraint seat for securing a child in a shopping cart, provided with a seat cushion and backrest on which the child is seated. A pair of shoulder belts, fastened at the mid portions to the seat backrest, has two pairs of end portions which, equipped with a pair of belt connectors, consisting of tabs and receptacles, extend across in an X-shape over the child, being restrained when the tabs are inserted into the respective receptacles.

Harness restraint systems ref. to US 4,231,616, US 4,402,548, US 5,131,683, US 5,524,928, US 6,139,111, US 6,179,329 B1 and US 6,705,641 B2 are well-known as suspender belts. Each belt portion of the suspender belt or each belt must always be adjusted to an appropriate length depending on the size of the passenger as well as on what he is wearing. All these suspender belts have the following drawbacks:

D1. In general, suspender belts are not popular because finding all the belt portions and connecting all the attachment ends to the release device is a lengthy process, especially in the dark. Moreover, all the belt portions make an untidy impression and are not beneficial for sales.

D2. Exemplified in US 6,139,111, all four belts are retracted to different lengths and blocked by the four respective pretension retractors within different time frames in milliseconds in an accident. It doesn't work. Each five-person car additionally needs 15 pretension retractors. No car corporation will waste money for additional pretension retractors installed in millions of motor vehicles produced annually.

D3. Under the load of the same belt force in a front collision the deformation of the seat backrest, wherein both belt ends are fastened, is larger, thus increasing the forward motion.

D4. The biggest drawback is the failure of the restraint. When the belt force exceeds 24,000 N due to lack of energy absorbers in real-world accidents the passengers are severely/fatally injured. Moreover, the restraint fails because the belt elongates at a force-dependant rate over 25 %, shown in Fig. 6 of PCT/US99/13362 (US 09/098,294). A belted heavy driver of AUDI A6 freed himself out of the restraint in a rollover accident. The accident report "U281202" is incorporated herein.

Despite being properly restrained and properly seated on a child-seat, perfectly secured to the rear seat, a six-year old child, freeing himself out of the restraint, was ejected out



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